$t - \tau$ and $t + \tau$. It will be seen at once, on substitution, that

$$\theta_{\prime} + 2\theta + \theta' = 0.$$

Hence by combining the three readings according to the preceding formula, the deviation of the magnet from its mean position, arising from the vibratory movement, is completely eliminated; and it will readily appear that the same result may be attained by any greater number of readings, taken and combined according to the same law.

Now, let the value of θ contain an *additional* term, $+ pt$, proportional to the time : or, in other words, let us suppose that there is a *progressive* change of the declination, which may be regarded as *uniform* during the whole interval of observation. It is then manifest that $\theta_{\prime} + 2\theta + \theta' = 4pt$; and accordingly that the quantity

$$\tfrac{1}{4}\left(\theta_{\prime} + 2\theta + \theta'\right)$$

will give the mean place of the magnet corresponding to the epoch t.

The supposition of a uniform change can, however, be regarded as an approximation to the truth, only when the interval of time between the first and last reading is very small, in comparison with the interval between the successive maxima and minima, in the fluctuations of the irregular movement. Hence, we may conclude, that it is important, in the first place, to employ three readings in preference to any greater number ; and, secondly, that it is desirable that the time of vibration of the magnet itself should be as small as possible, consistently with the accuracy of its indications in other respects.

Professor Lloyd read the following extract of a letter from the Rev. George S. Smith, containing some facts relative to the storm of May 26th and 27th.

" It appears that the thunder storm commenced on Wednesday night in Tipperary, Clare, Limerick, and Waterford, reaching its greatest violence on Thursday morning at about six. It was on Thursday evening that it was most severe in Carlow and Queen's County, from nine till twelve P.M., having, however, been felt in the morning of the same day. On Thursday evening it began in Dublin; but the thunder was loudest at half-past three A.M. on Friday morning. On Friday morning, at ten o'clock, A.M., it raged in the county Mayo.

" In Windsor forest and the neighbouring country it was a more furious tempest, and took place on the evening of Thursday the 27th, as in the county Carlow.

" It was reported to me, that there were some remarkable phenomena of the tide in Dublin Bay during the storm ; and I accordingly inquired from a variety of persons on the quays and elsewhere, and they concurred in stating, that about half-past three the tide, which was then flowing and approaching to high water, suddenly retired in half an hour to low water mark, and that it rapidly returned and rose two feet higher than high water mark, and so quickly that boats were knocked violently against each other. The coal-porters, and dockyard keepers, and various sailors both in the river and Kingstown, agreed in this statement.

" Further, in the River Foyle, in the North of Ireland, there is an embankment in the course of being formed by Thomas Hutton, Esq., and he states that the tide on Thursday night, or Friday morning, retired so suddenly, that considerable damage was done to his embankment.

" The concurrence of these phenomena with the storm is a point of some interest; and I write these few lines to invite inquiry, and to ascertain, if possible, whether this extraordinary tide-wave was generally observed, and on what day and hour, and whether it coincided or not with the storm.

" The newspapers report the occurrence of the storm, as mentioned above; but say nothing of the tide.

" The course of the storm seems to have been from south to north ; but I think a north-east wind was blowing."

A communication by Francis Crawford, Esq., A.B., " On the Utility of the Irish Language in Classical Studies," was read.

The object of the writer was to show, that, notwithstanding the contempt and ridicule into which the subject had fallen in consequence of the rash and unphilosophic views of injudicious advocates, still there existed reasonable grounds for believing that a careful and sober analysis of Heathen mythological names would resolve them into *Celtic* elements through the medium of *Irish ;* accordingly he proceeded to give numerous instances of such analysis, at the same time declaring, that unless supported by such analogies, or other external evidence, as he offered, investigations of this sort were by no means to be relied upon.

After interpreting, in this manner, the names of some of the Syrian deities mentioned by Selden, in his learned work " De Dis Syris," the writer went on to set the whole subject in a more interesting point of view, by attempting to show, that even the Bible might receive illustration and confirmation from such inquiries ; to effect this, he undertook to identify the *Melchizedek* of Scripture with the famous *Tyrian Hercules;* he shewed at some length, that they were contemporaries in history, that they agreed in character, that tithes were paid to both, and finally that the name of *Malcarth*, by which the *Tyrian Hercules* was best known, when resolved into its Celtic components Maɫ-ceapc, literally signified " Righteous King," or "*King of Righteousness.*"

The writer, after some further proofs of their identity,